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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Guntram Scheible

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VENABLE LLP

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WASHINGTON, DC 20043-9998

EXAMINER

ZHANG, JUE

ART UNIT

PAPER NUMBER

2838

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,167	Applicant(s) SCHEIBLE ET AL.	
	Examiner JUE ZHANG	Art Unit 2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office action is in answer to the response filed on 3/24/2009. Claims 1-13 are pending, of which claims 1, 4, 5, 7-8, 10-13 are amended by the present amendment.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6, 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chabrol (US Patent No. 4223313, hereinafter '313), in view of Goto (US Patent No. 5600225, hereinafter '225).

For claim 1, '313 teaches a power supply system for an industrial robot (Abstract; Fig. 1-2), comprising:

a transmitting part attached to the industrial robot (Abstract; Fig. 1-2) and comprising

a first coil (33) and a first converter (12) for producing an alternating magnetic field from the first coil, the transmitting part further comprising a tunable resonance electric circuit (e.g., the resonance frequency can be tuned by changing the value of the capacitance of the capacitor of 16)(Fig. 1-2); and a receiving part attached to a tool operatively connected to the robot comprising

a second coil (34) for providing an alternating current by induction from the alternating magnetic field and a second converter (e.g., 21, 35, 36, 37) for producing from the alternating current a direct current for providing power to a tool carried by the robot,

wherein the second coil is detachable from the first coil (Fig. 1-2).

'313 does not explicitly disclose that the first coil is an air cored coil.

However, using an air-cored coil to transmit energy inductively to a receiving coil is known to one of ordinary in art at the time of invention. '225 discloses a battery charging system (Fig. 1-2) using an air-cored coil 103 on the transmitting part 101 of the system to inductively transfer the energy inductively to a receiving coil 212 on the receiving part (201) of the system when 103 being detachably attached to 201 (Fig. 1-2). Therefore, the subject matter as whole would have been obvious to one of ordinary skill in art at the time of invention to have used the air-cored transmitting coil and the receiving coil of '225 as the first coil and the second coils of the power supply system of '313, as taught by '225, in order to have transferred the energy inductively to the detachably attached receiving coil, since '225 has demonstrated that it is a suitable method to have transferred energy inductively to a detachably attached receiving coil.

Claim 2. '313 and '225 teach the limitations of claim 1 as discussed above. It further teaches that wherein the first coil and the second coil are arranged coaxially (Fig. 2).

Claim 3, '313 and '225 teach the limitations of claim 1 as discussed above. '313 further teaches that wherein the first coil and the second coil are arranged in parallel

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planes (fig. 2).

Claim 4, '313 and '225 teach the limitations of claim 1 as discussed above. '313 further teaches that wherein the first coil and the second coil comprises a ring-shaped form (Fig. 2).

Claim 6, '313 and '225 teach the limitations of claim 1 as discussed above. '313 further teaches that wherein the second coil comprises a core of magnetizable material (Fig. 2).

For method claims 8-9, note that under MPEP 2112.02, the principles of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device will inherently perform the claimed process. In re King, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986). Therefore the previous rejections based on the apparatus will not be repeated.

Claim 10 '313 and '225 teach the limitations of claim 1 as discussed above.

'313 further teaches an industrial robot, comprising a power supply system according to claim 1 (Fig. 1).

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chabrol ('313), in view of Goto ('225), further in view of Park et al. (US PG Pub No. 20020110013, hereinafter '013).

Claim 5, '313 and '225 disclose the invention except for the first coil and the

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second coil comprising a printed circuit board. '013 discloses a power transformer comprising PCB in the primary and secondary winding/coil for in order to transfer power contactlessly (Abstract; Fig. 1-5). Therefore, the subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the transformer with the coil comprising PCB of '013 in the power transferring and receiving parts of '313, as taught by '013, in order to have transferred power contactlessly, because '013 has demonstrated that it is a suitable method in order to have transferred power contactlessly.

4. Claims 7, 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chabrol ('313), in view of Goto ('225), further in view of Boys at al. (US Patent No. 5821638, hereinafter '638).

For claim 7, '313 and '225 teach the limitations of claim 1 as discussed above. '313 and '225 do not explicitly teach that any of the first converter and the second converter comprises a control unit containing a microprocessor and memory means. '638 discloses an inductive power transfer system with an controller comprising microprocessor and memory means for controlling the power transfer of the system inductively (Abstract; Fig. 6 and corresponding text). Therefore, the subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made to have used an controller comprising microprocessor and memory means for controlling the power transfer of the system of '313, as taught by '638, in order to have controlled the power transfer of the system inductively, because '638 has demonstrated that it is a suitable method in order to have controlled the power transfer

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of the system inductively.

Claim 11, '313 and '225 teach the limitations of claim 8 as discussed above except for a computer program product comprising instructions for affect a processor to perform the method according to claim 8 on a computer readable medium. '638 further discloses a computer readable medium (i.e., the memory means of 601) containing a computer program product. '638 reads on the same obviousness as discussed above (Fig. 6).

Claim 12, 13, '313, '225, and '638 disclose the invention discussed above except for the computer program product provided at least in part over a network as internet. However, it is well-known to one in art at the time of invention a computer program can be transferred or downloaded through a network including internet. Therefore, the subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the computer program through network, as because it is known to one in art that a computer program can be transferred or downloaded through a network including internet.

Response to Amendment

5. Applicant's arguments filed 3/24/2009 have been fully considered and here is examiner's reply for the reasons discussed below.

- Applicant stated on page 6 of the Remarks as regarding to the USC 35 Section 112 2nd Para. Rejections has been considered and the rejections has been withdrawn in view of Applicant's latest amendments.

- Applicant's arguments regarding to the USC 35 Section 102 and 103 rejections have been fully considered but are moot in view of the new ground of rejection.

Examiner's Note:

6. Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

7. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUE ZHANG whose telephone number is (571)270-1263. The examiner can normally be reached on M-Th 7:30-5:00PM EST, Other F 7:30AM-5:00PM EST

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayprakash N. Gandhi can be reached on 571-272-3740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Adolf Berhane/
Adolf Berhane
Primary Examiner
Art Unit 2838

JZ